

Application No. 10/070,401

Title: GRAPHICAL USER INTERFACE AND METHOD RELATED THERETO

Amendment responsive to Office Action dated: February 25, 2004

Amendments to the Specification:

Please amend the Abstract to read as follows:

A graphical user interface for the monitoring and/or controlling of a computer controlled dairy farm system, or part thereof, by a human user, is disclosed, which includes a computer based graphical and schematic representation of the dairy farm system, or part thereof, where the representation includes objects, each of which represents a respective part of the dairy farm system, or part thereof, and having at least one associated physical property, wherein ~~each of the at least one~~ physical property associated with the respective object is included among physical properties of the respective represented part of the dairy farm system, or part thereof. ~~Each of the at least one~~ physical property which is included among the properties of the respective represented part of the dairy farm system, or part thereof, is preferably chosen from the group of spatial location, size, shape, color, direction, movement, amount, rate, frequency and distance from other objects.

Please replace the paragraph beginning at page 3, line 15, with the following amended paragraph:

These objects among others are, according to one aspect of the invention, fulfilled by a graphical user interface ~~as claimed in Claim 1:~~ having a computer based graphical and schematic representation of a dairy farm system, or a part thereof, where the representation includes objects, each of which represents a respective part of the dairy farm system, or part thereof, and each object has at least one

Application No. 10/070,401

Title: GRAPHICAL USER INTERFACE AND METHOD RELATED THERETO

Amendment responsive to Office Action dated: February 25, 2004

associated physical property included from among the physical properties of the represented part of the dairy farm system or part thereof.

Please replace the paragraph beginning at page 3, line 24, with the following amended paragraph:

Consequently, there is according to a second aspect of the present invention provided a method as ~~claimed in Claim 16:~~ for providing a graphical user interface for monitoring and/or controlling of a computer controlled dairy farm system or part thereof, by a human user, the method including displaying a computer based graphical and schematic representation of the dairy farm system or part thereof, where the representative includes objects, each of which represents a respective part of the dairy farm system, or part thereof, and each object has at least one associated physical property, each at least one physical property associated with the respective object is included from among physical properties associated with the respective object is included from among physical properties of the respective represented part of the dairy farm system, or part thereof.

Please replace the paragraph beginning at page 4, line 22, with the following amended paragraph:

In the following description, for purposes of explanation and not limitation, specific details are set ~~fourth~~ forth, such as particular hardware, applications, techniques, etc. in order to provide a thorough understanding of the present invention. However, it will be apparent to one skilled in the art that the present invention may be practiced in other embodiments that depart from these specific details. In

Application No. 10/070,401

Title: GRAPHICAL USER INTERFACE AND METHOD RELATED THERETO

Amendment responsive to Office Action dated: February 25, 2004

other instances, detailed descriptions of well-known methods, protocols, apparatuses, and circuits are omitted so as not to obscure the description of the present invention with unnecessary details.

Please replace the paragraph beginning at page 7, line 5, with the following amended paragraph:

A first embodiment of the present invention will now be described with reference to Fig. 1, which schematically illustrates a graphical user interface¹⁰ used for e.g. monitoring or controlling of a milking machine of the above depicted type during a particular phase of the milking denoted "Teat attach and Milking"¹². Here, the four teats of the cow are represented graphically by four boxes, 14, 16, 18, 20, labeled "Start Milking", located relative each other as they do in reality, i.e. with a larger distance between the front teats than between the back teats. This is a fact well known to every single farmer, and hence the risk for making a mistake while identifying the teats for further handling such as milking, is minimized. When viewing the interface and the milking machine, respectively, from the same position, the cow and the graphical teat representation should preferably have their fronts facing towards the same direction, i.e. towards the right in the illustrated case. But in either case, the risk of making a mistake is severely reduced.

Please replace the paragraph beginning at page 7, line 23, with the following amended paragraph:

Furthermore, each teat representation has a respective status indication 22,24,26,28 associated therewith, which indicates whether the teat is being milked or not. In Fig. 1 the representations show

Application No. 10/070,401

Title: GRAPHICAL USER INTERFACE AND METHOD RELATED THERETO

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“Start milking” and the teats are thus not being milked. By activating the milking manually, e.g. by pressing the “Start milking” buttons, or whether it is performed automatically, the representations are starting to indicate the milk mass flow in real time. Next to each representation, there is a status indication of the milk yield (in grams), i.e. accumulated collected milk, from the respective teat during the milking.

Please replace the paragraph beginning at page 8, line 5, with the following amended paragraph: Considering next Fig. 2 which illustrates a graphical user interface 10a according a second embodiment of the present invention corresponding to an adjustment phase, i.e. for teat cup testing of the milking machine. At this stage, the teat cups are located along a line in a magazine at one side of the milking machine. The interface has graphical representations 30,32,34,36 of the teat cups in this location and the coupling between the respective positions, i.e. in its magazine and attached to teat, is shown by color—coding of the respective representations. Thus, there is a mapping between the teat cup in its magazine position and in its position during milking.

Please replace the paragraph beginning at page 8, line 17, with the following amended paragraph: Alternatively, the coupling may be indicated by arrows 40,42 or movement directions for how a respective teat cup is moved during teat attachment and detachment, which may be activated

Application No. 10/070,401

Title: GRAPHICAL USER INTERFACE AND METHOD RELATED THERETO

Amendment responsive to Office Action dated: February 25, 2004

automatically or by the user, e.g. by clicking, double clicking or movement through the so-called drag-and-drop technique of the respective graphical representation.

Please replace the paragraph beginning at page 8, line 24, with the following amended paragraph:
Considering next Fig. 3 which illustrates a graphical user interface 10b according a third embodiment of the present invention corresponding to another adjustment phase of the milking machine, i.e. a stall control, for adjusting of manger position, a rear plate, and entry and exit gates, respectively.

Please replace the paragraph beginning at page 8, line 30, with the following amended paragraph:
Here, the rear plate, i.e. a plate for collecting cow excrements, may be in either of two positions; in a "Pull Back" position wherein it is out of use and removed from the stall enabling the cow to enter the stall from left, i.e. through an entry gate, or in a "Release" position wherein it is positioned behind the cow, when the cow is in the stall, for collecting of excrements. The plate is moved as indicated by the arrows 44,46, i.e. to the left when it is pulled back and to the right when it is released. The position of the manger is utilized for adjustment of the stall length to each individual cow. This is performed by variably position the manger; more to the left for shorter cows and more to the right for longer cows, as indicated by the scroll bar 48 (and the arrows 50,52 in the Figure). Finally, the entry and exit gates have push buttons 54,56,58 and 60 for opening and closing.

Application No. 10/070,401

Title: GRAPHICAL USER INTERFACE AND METHOD RELATED THERETO

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The gates are preferably opened from the far side of the user and closed from the close side, as indicated by the positions of the respective push buttons in the Figure.